

sc-203370



The Power is Questioned

Hazard Alert Code Key:

EXTREME

HIGH

MODERATE

LOW

PRODUCT NAME

STATEMENT OF HAZARDOUS NATURE

CONSIDERED A HAZARDOUS SUBSTANCE ACCORDING TO OSHA 29 CFR 1910.1200.

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2145 Delaware Avenue
Santa Cruz, California 95060
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ChemWatch

ChemWatch

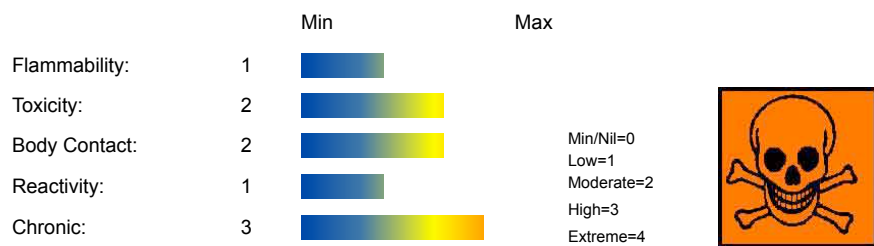
Within the US & Canada: 877-715-9305

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(1-800-CHEMCALL) or call +613 9573 3112

C33-H40-N2-O9, "3-beta, 20-alpha-yohimban-16-beta-carboxylic acid, ", "18-beta-hydroxy-11, 17-alpha-dimethoxy-, methyl ester, ", "3, 4, 5-trimethoxybenzoate (ester)", "methyl 11, 17-alpha-dimethoxy-18-beta-(3, 4, 5-trimethoxybenzoyloxy)-", "3-beta, 20-alpha-yohimbane-16-beta-carboxylate", "methyl 18-O-(3, 4, 5-trimethoxybenzoyl)reserpate", "methyl reserpate 3, 4, 5-trimethoxybenzoic acid" "methyl reserpate 3, 4, 5-trimethoxybenzoic acid ester", "3, 4, 5-trimethoxybenzoyl methyl reserpate", "yohimban-16-carboxylic acid derivative of benz(G)indolo(2, 3-A)quinolizine", Abesta, Abicol, Adelfan, Adelphane, Adelphin, Adelphin-Esidx-K, Alkarau, Alkserp, Alserin, Anquil, Apoplon, Apiscal, "Arcum R-S", Ascoserp, Ascoserpina, Austrapine, Banasil, Banisil, Benazyl, Bendigon, Bioserpine, Brinderdin, Briserpine, Carditovo, Cardioserpin, Carrserp, Crystoserpine, Darebon, Deserpine, Diupres, Diutensen-R, Drenusil-R, "Dypertane Compound", Eberpine, Eberspine, Ebserpine, Elfanex, Elserpine, Enipresser, "ENT 50146", Escasperse, Eserpine, Eskasper, Gammaserpine, Gilucard, Gamaserpine, H-520, Helfoserpin, Hexaplin, Hiposerpil, Hiserpia, "Hydromox R", Hydropres, "Hydrpores KA", Hygroton-Reserpine, "Hypercal B", "Hypertane Forte", Hypertensan, Idoserp, Idoserpin, Interpina, Key-Serpine, Kitime, Klimanosid, ""L""", Carpserp, Lemiserp, Loweserp, "Martensian Simple", Maviserpine, Mayserpine, Mephaserpin, Metatensin, Miopressin, Modenol, Naquival, NCI-C5-5157, Nembu-Serpin, Neo-Antitensol, Neo-Antitersol, Neoserpin, Neo-Serp, Neoslowten, Orthoserpina, Perskleran, Pressimedin, Purserpine, Quiescin, Rauca, Raudiford, Raudixin, Raudixoid, Raugal, Raulen, Rauloycin, Rauloydin, Raumorine, Raunorine, Raunorine, "Raunormin ' Orzan", Raunova, Raupasil, Raupoid, Raurin, Rausan, Rau-Sed, Rausedan, rasedil, Rausedyl, Rauserpen-Alk, Rauserpin, alkaloid

CHEMWATCH HAZARD RATINGS



CANADIAN WHMIS SYMBOLS



EMERGENCY OVERVIEW

RISK

May cause CANCER.

May cause harm to the unborn child.

Harmful by inhalation, in contact with skin and if swallowed.

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

■ Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.

■ Side-effects often include nasal congestion, dryness of the mouth, depression, drowsiness, lethargy, nightmares, diarrhoea, gastrointestinal disturbances, vertigo, dyspnoea, pruritis (itching) and skin rashes. Higher dose rates may produce, flushing, cardiac arrhythmias, angina-like syndrome and bradycardia (depression of heart-rate) and finally heart arrest. Severe depression may lead to suicide and, occasionally, a Parkinsonian-like syndrome.

EYE

■ Although the material is not thought to be an irritant, direct contact with the eye may cause transient discomfort characterized by tearing or conjunctival redness (as with windburn). Slight abrasive damage may also result.

SKIN

■ Skin contact with the material may be harmful; systemic effects may result following absorption.

■ The material is not thought to be a skin irritant (as classified using animal models). Abrasive damage however, may result from prolonged exposures.

■ Open cuts, abraded or irritated skin should not be exposed to this material.

■ Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

INHALED

■ Inhalation of dusts, generated by the material, during the course of normal handling, may be harmful.

■ The material is not thought to produce respiratory irritation (as classified using animal models). Nevertheless inhalation of dusts, or fume, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress.

■ Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.

CHRONIC HEALTH EFFECTS

■ There is ample evidence that this material can be regarded as being able to cause cancer in humans based on experiments and other information.

Ample evidence exists, from results in experimentation, that developmental disorders are directly caused by human exposure to the material.

Long term effects of exposure to reserpine include anxiety (paradoxically), blurred vision, breast engorgement and galactorrhea (spontaneous flow of milk), gynaecomastia (breast enlargement), disturbance of ejaculation, impotence, epistaxis (nose bleed), headache, difficulty in passing water, sodium retention, oedema, peptic ulceration and purpura (small skin lesions) .

Various reports describe the association between ingestion and the development of breast neoplasms. This finding is equivocal.

Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis; caused by particles less than 0.5 micron penetrating and remaining in the lung.

Exposure to the material for prolonged periods may cause physical defects in the developing embryo (teratogenesis).

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
reserpine	50-55-5	>98

Section 4 - FIRST AID MEASURES

SWALLOWED

· IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY. · Where Medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless instructed otherwise:

EYE

■ If this product comes in contact with the eyes: · Wash out immediately with fresh running water. · Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

SKIN

■ If skin contact occurs: · Immediately remove all contaminated clothing, including footwear · Flush skin and hair with running water (and soap if available).

INHALED

· If fumes or combustion products are inhaled remove from contaminated area. · Lay patient down. Keep warm and rested.

NOTES TO PHYSICIAN

■ For reserpine intoxication:

- Withdrawal of reserpine or reduction of dose reverses many side-effects.
- In reserpine overdose, empty the stomach by aspiration and lavage.
- Severe hypotension may respond by placing patient in the supine position with raised feet.
- The effects of gross over-dose may be treated with cautious infusion of plasma or the injection of noradrenaline, phenylephrine or metaraminol.

· If there is marked bradycardia, especially with cardiac arrhythmias, vagal blocking agents such as atropine sulfate may be injected with the appropriate measures. the patient should be observed for at least 72 hours.

Reserpine is absorbed from the gastro-intestinal tract; about 6% is excreted from the urine in the first 24 hours and a further 2% over the next 3 days, mainly as the metabolite trimethoxybenzoic acid.

Over 60% is excreted in the faeces over the first 4 days, mainly unchanged.

Martindale.

Section 5 - FIRE FIGHTING MEASURES

Vapour Pressure (mmHG):	Negligible
Upper Explosive Limit (%):	Not available
Specific Gravity (water=1):	Not available
Lower Explosive Limit (%):	Not available

EXTINGUISHING MEDIA

- Foam.
- Dry chemical powder.

FIRE FIGHTING

- Alert Emergency Responders and tell them location and nature of hazard.
- Wear full body protective clothing with breathing apparatus.

When any large container (including road and rail tankers) is involved in a fire, consider evacuation by 800 metres in all directions.

GENERAL FIRE HAZARDS/HAZARDOUS COMBUSTIBLE PRODUCTS

- Combustible solid which burns but propagates flame with difficulty.
 - Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; accumulations of fine dust may burn rapidly and fiercely if ignited.
- Combustion products include: carbon monoxide (CO), carbon dioxide (CO₂), nitrogen oxides (NO_x), other pyrolysis products typical of burning organic material.
- May emit poisonous fumes.

FIRE INCOMPATIBILITY

■ Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc. as ignition may result.

PERSONAL PROTECTION

Glasses:
Gloves:
Respirator:
Particulate

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

- Clean up waste regularly and abnormal spills immediately.
- Avoid breathing dust and contact with skin and eyes.
- Wear protective clothing, gloves, safety glasses and dust respirator.
- Use dry clean up procedures and avoid generating dust.
- Vacuum up or sweep up. NOTE: Vacuum cleaner must be fitted with an exhaust micro filter (HEPA type) (consider explosion-proof machines designed to be grounded during storage and use).
- Dampen with water to prevent dusting before sweeping.

- Place in suitable containers for disposal.
- MAJOR SPILLS**
- Clear area of personnel and move upwind.
 - Alert Emergency Responders and tell them location and nature of hazard.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- Avoid all personal contact, including inhalation.
 - Wear protective clothing when risk of exposure occurs.
- Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignition source.
- Do NOT cut, drill, grind or weld such containers.
 - In addition ensure such activity is not performed near full, partially empty or empty containers without appropriate workplace safety authorisation or permit.

RECOMMENDED STORAGE METHODS

- Glass container.
 - Lined metal can, Lined metal pail/drum
 - Plastic pail.
- For low viscosity materials
- Drums and jerricans must be of the non-removable head type.
 - Where a can is to be used as an inner package, the can must have a screwed enclosure.

STORAGE REQUIREMENTS

- Store in original containers.
- Keep containers securely sealed.

NOTE: Store in the dark.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

Source	Material	TWA ppm	TWA mg/m³	STEL ppm	STEL mg/m³	Peak ppm	Peak mg/m³	TWA F/CC	Notes
US - California Permissible Exposure Limits for Chemical Contaminants	reserpine (Particulates not otherwise regulated Respirable fraction)		5						(n)
US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants	reserpine (Particulates not otherwise regulated Respirable fraction)		5						
US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants	reserpine (Particulates not otherwise regulated (PNOR)(f)-Respirable fraction)		5						
US - Michigan Exposure Limits for Air Contaminants	reserpine (Particulates not otherwise regulated, Respirable dust)		5						
Canada - Prince Edward Island Occupational Exposure Limits	reserpine (Particles (Insoluble or Poorly Soluble) [NOS] Inhalable particles)		10						See Appendix B current TLV/BEI Book

PERSONAL PROTECTION



RESPIRATOR

Particulate

Consult your EHS staff for recommendations

EYE

■ For laboratory, larger scale or bulk handling or where regular exposure in an occupational setting occurs:

- Chemical goggles
- Face shield. Full face shield may be required for supplementary but never for primary protection of eyes
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].

HANDS/FEET

■ Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include: such as:

- frequency and duration of contact,
- chemical resistance of glove material,
- glove thickness and
- dexterity

Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739).

- When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374) is recommended.
- When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374) is recommended.

· Contaminated gloves should be replaced.

Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.

· Rubber gloves (nitrile or low-protein, powder-free latex). Employees allergic to latex gloves should use nitrile gloves in preference.

· Double gloving should be considered.

· PVC gloves.

· Protective shoe covers.

· Head covering.

OTHER

· Employees working with confirmed human carcinogens should be provided with, and be required to wear, clean, full body protective clothing (smocks, coveralls, or long-sleeved shirt and pants), shoe covers and gloves prior to entering the regulated area.

· Employees engaged in handling operations involving carcinogens should be provided with, and required to wear and use half-face filter-type respirators with filters for dusts, mists and fumes, or air purifying canisters or cartridges. A respirator affording higher levels of protection may be substituted.

· Emergency deluge showers and eyewash fountains, supplied with potable water, should be located near, within sight of, and on the same level with locations where direct exposure is likely.

· Prior to each exit from an area containing confirmed human carcinogens, employees should be required to remove and leave protective clothing and equipment at the point of exit and at the last exit of the day, to place used clothing and equipment in impervious containers at the point of exit for purposes of decontamination or disposal. The contents of such impervious containers must be identified with suitable labels. For maintenance and decontamination activities, authorized employees entering the area should be provided with and required to wear clean, impervious garments, including gloves, boots and continuous-air supplied hood.

· Prior to removing protective garments the employee should undergo decontamination and be required to shower upon removal of the garments and hood.

· For quantities up to 500 grams a laboratory coat may be suitable.

· For quantities up to 1 kilogram a disposable laboratory coat or coverall of low permeability is recommended. Coveralls should be buttoned at collar and cuffs.

· For quantities over 1 kilogram and manufacturing operations, wear disposable coverall of low permeability and disposable shoe covers.

· For manufacturing operations, air-supplied full body suits may be required for the provision of advanced respiratory protection.

· Eye wash unit.

· Ensure there is ready access to an emergency shower.

· For Emergencies: Vinyl suit.

ENGINEERING CONTROLS

- Employees exposed to confirmed human carcinogens should be authorized to do so by the employer, and work in a regulated area.
- Work should be undertaken in an isolated system such as a "glove-box" . Employees should wash their hands and arms upon completion of the assigned task and before engaging in other activities not associated with the isolated system.
- Within regulated areas, the carcinogen should be stored in sealed containers, or enclosed in a closed system, including piping systems, with any sample ports or openings closed while the carcinogens are contained within.
- Open-vessel systems are prohibited.
- Each operation should be provided with continuous local exhaust ventilation so that air movement is always from ordinary work areas to the operation.
- Exhaust air should not be discharged to regulated areas, non-regulated areas or the external environment unless decontaminated. Clean make-up air should be introduced in sufficient volume to maintain correct operation of the local exhaust system.
- For maintenance and decontamination activities, authorized employees entering the area should be provided with and required to wear clean, impervious garments, including gloves, boots and continuous-air supplied hood. Prior to removing protective garments the employee should undergo decontamination and be required to shower upon removal of the garments and hood.
- Except for outdoor systems, regulated areas should be maintained under negative pressure (with respect to non-regulated areas).
- Local exhaust ventilation requires make-up air be supplied in equal volumes to replaced air.
- Laboratory hoods must be designed and maintained so as to draw air inward at an average linear face velocity of 150 feet/ min. with a minimum of 125 feet/ min. Design and construction of the fume hood requires that insertion of any portion of the employees body, other than hands and arms, be disallowed.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL PROPERTIES

Solid.

Does not mix with water.

State	Divided solid	Molecular Weight	608.7
Melting Range (°F)	507.2- 509 (decomp)	Viscosity	Not Applicable
Boiling Range (°F)	Not applicable	Solubility in water (g/L)	Immiscible
Flash Point (°F)	Not available	pH (1% solution)	Not applicable
Decomposition Temp (°F)	Not available	pH (as supplied)	Not applicable
Autoignition Temp (°F)	Not available	Vapour Pressure (mmHG)	Negligible
Upper Explosive Limit (%)	Not available	Specific Gravity (water=1)	Not available
Lower Explosive Limit (%)	Not available	Relative Vapor Density (air=1)	Not Applicable
Volatile Component (%vol)	Negligible	Evaporation Rate	Not Applicable

APPEARANCE

Odourless, almost tasteless fine white or yellow crystalline powder; does not mix with water.. Soluble in alcohol (1:2000), acetone (1:90), chloroform (1: 6); freely soluble in acetic acid. Darkens slowly on exposure to light.

Section 10 - CHEMICAL STABILITY

CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.

STORAGE INCOMPATIBILITY

- Avoid reaction with oxidizing agents.

For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11 - TOXICOLOGICAL INFORMATION

RESERPINE

TOXICITY AND IRRITATION

RESERPINE:

- unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

TOXICITY	IRRITATION
Oral (rat) LD50: 420 mg/kg	Nil Reported
Intraperitoneal (rat) LD50: 44 mg/kg	
Subcutaneous (rat) LD50: 25 mg/kg	

Intravenous (rat) LD50: 15 mg/kg
Intravenous (Mouse) LD50: 21 mg/kg
Intravenous (Dog) LD50: 0.5 mg/kg
Intraperitoneal (Rabbit) LD50: 7 mg/kg
Intravenous (Rabbit) LD50: 15 mg/kg
Subcutaneous (Guinea pig) LD50: 65 mg/kg
Intraperitoneal (Rat) TDLo: 5 mg/kg
Intraperitoneal (Mouse) LD50: 5 mg/kg
Subcutaneous (Mouse) LD50: 5.61 mg/kg
Intravenous (Guinea pig) LD: 16 mg/kg
Intravenous (Rat) TDLo: 0.3 mg/kg
Intraperitoneal (Mouse) TDLo: 2.5 mg/kg
Subcutaneous (Mouse) TDLo: 2 mg/kg

■ For reserpine:

There has been much concern about reserpine causing depression leading to suicide. However, this was reported in uncontrolled studies using doses averaging 0.5 mg per day.

Reserpine can cause: nasal congestion, nausea, vomiting, weight gain, gastric intolerance, gastric ulceration (due to increased cholinergic activity in gastric tissue and impaired mucosal quality), stomach cramps and diarrhea are noted. The drug causes hypotension and bradycardia and may worsen asthma. Congested nose and erectile dysfunction are other consequences of alpha-blockade. Depression can occur at any dose and may be severe enough to lead to suicide. Other central effects are a high incidence of drowsiness, dizziness, and nightmares. Parkinsonism occurs in a dose dependent manner. General weakness or fatigue is quite often encountered.

High dose studies in rodents found reserpine to cause fibroadenoma of the breast and malignant tumors of the seminal vesicles among others. Early suggestions that reserpine causes breast cancer in women (risk approximately doubled) were not confirmed. It may also cause hyperprolactinaemia.

Reserpine passes into breast milk and is harmful to breast-fed infants, and should therefore be avoided during breast feeding.

Reserpine acts by blocking the vesicular monoamine transporter VMAT, which normally transports free norepinephrine, serotonin, and dopamine from the cytoplasm of the presynaptic nerve into vesicles for subsequent release into the synaptic cleft. The unprotected neurotransmitters are then metabolized by MAO (monoamine oxidase) and therefore never reach the synapse.

Tenth Annual Report on Carcinogens: Substance anticipated to be Carcinogen
[National Toxicology Program: U.S. Dep. of Health & Human Services 2002].

Exposure to the material for prolonged periods may cause physical defects in the developing embryo (teratogenesis).

Carcinogenic and neoplastic by RTECS criteria.

IARC Cancer Review: Animal Limited Evidence; Human Inadequate Evidence.

CARCINOGEN

RESERPINE	US Environmental Defense Scorecard Recognized Carcinogens	Reference(s)	P65
RESERPINE	US Environmental Defense Scorecard Suspected Carcinogens	Reference(s)	P65

Section 12 - ECOLOGICAL INFORMATION

This material and its container must be disposed of as hazardous waste.

Ecotoxicity

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
reserpine	HIGH		LOW	LOW

Section 13 - DISPOSAL CONSIDERATIONS

US EPA Waste Number & Descriptions

B. Component Waste Numbers

When reserpine is present as a solid waste as a discarded commercial chemical product, off-specification species, as a container residue, or a spill residue, use EPA waste number U200 (waste code T).

Disposal Instructions

All waste must be handled in accordance with local, state and federal regulations.

· Puncture containers to prevent re-use and bury at an authorized landfill.

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction
- Reuse
- Recycling
- Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.

DO NOT allow wash water from cleaning equipment to enter drains. Collect all wash water for treatment before disposal.

- Recycle wherever possible.
- Consult manufacturer for recycling options or consult Waste Management Authority for disposal if no suitable treatment or disposal facility can be identified.

Section 14 - TRANSPORTATION INFORMATION

DOT:

Symbols: None Hazard class or Division: 6.1

Identification Numbers: UN1544 PG: III

Label Codes: 6.1 Special provisions: IB8, IP3, T1, TP33

Packaging: Exceptions: 153 Packaging: Non- bulk: 213

Packaging: Exceptions: 153 Quantity limitations: 100 kg

Passenger aircraft/rail:

Quantity Limitations: Cargo 200 kg Vessel stowage: Location: A aircraft only:

Vessel stowage: Other: None

Hazardous materials descriptions and proper shipping names:

Alkaloids, solid, n.o.s. or Alkaloid salts, solid, n.o.s. poisonous

Air Transport IATA:

ICAO/IATA Class: 6.1 ICAO/IATA Subrisk: None

UN/ID Number: 1544 Packing Group: III

Special provisions: A3

Cargo Only

Packing Instructions: 619 Maximum Qty/Pack: 200 kg

Passenger and Cargo Passenger and Cargo

Packing Instructions: 619 Maximum Qty/Pack: 100 kg

Passenger and Cargo Limited Quantity Passenger and Cargo Limited Quantity

Packing Instructions: Y619 Maximum Qty/Pack: 10 kg

Shipping Name: ALKALOID SALTS, SOLID, N.O.S. *(CONTAINS RESERPINE)

Maritime Transport IMDG:

IMDG Class: 6.1 IMDG Subrisk: None

UN Number: 1544 Packing Group: III

EMS Number: F-A , S-A Special provisions: 43 223 274

Limited Quantities: 5 kg

Shipping Name: ALKALOIDS, SOLID, N.O.S. or ALKALOIDS SALTS, SOLID, N.O.S.

Section 15 - REGULATORY INFORMATION

reserpine (CAS: 50-55-5) is found on the following regulatory lists;

"Canada Non-Domestic Substances List (NDSL)", "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "US - California Air Toxics ""Hot Spots"" List (Assembly Bill 2588) Substances for which emissions must be quantified", "US - California Occupational Safety and Health Regulations (CAL/OSHA) - Hazardous Substances List", "US - California Proposition 65 - Carcinogens", "US - California Proposition 65 - No Significant Risk Levels (NSRLs) for Carcinogens", "US - Connecticut Hazardous Air Pollutants", "US - Maine Chemicals of High Concern List", "US - Massachusetts Oil & Hazardous Material List", "US - Minnesota Hazardous Substance List", "US - New Jersey Right to Know Hazardous Substances", "US - Pennsylvania - Hazardous Substance List", "US - Vermont Hazardous Constituents", "US - Vermont Hazardous wastes which are Discarded Commercial Chemical Products or Off-Specification Batches of Commercial Chemical Products or Spill Residues of Either", "US - Washington Dangerous waste constituents list", "US - Washington Discarded Chemical Products List - ""U"" Chemical Products", "US Department of Transportation (DOT) List of Hazardous Substances and Reportable Quantities - Hazardous Substances Other Than Radionuclides", "US List of Lists - Consolidated List of Chemicals Subject to EPCRA, CERCLA and Section 112(r) of the Clean Air Act", "US National Toxicology Program (NTP) 11th Report Part B. Reasonably Anticipated to be a Human Carcinogen", "US RCRA (Resource Conservation & Recovery Act) - Hazardous Constituents - Appendix VIII to 40 CFR 261", "US RCRA (Resource Conservation & Recovery Act) - List of Hazardous Wastes", "US Toxic Substances Control Act (TSCA) - Inventory", "US TSCA Section 12(b) - List of Chemical Substances Subject to Export

Section 16 - OTHER INFORMATION

ND

Substance CAS Suggested codes reserpine 50- 55- 5

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■ Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:
www.chemwatch.net/references.

■ The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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